

METHOD FOR MOTION SIMULATION OF AN ARTICULATED FIGURE USING ANIMATION INPUT

ABSTRACT OF THE DISCLOSURE

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Motion of an articulated figure in response to an external force function and to a co-acting internal force function is simulated, for use in computer animation. The internal force function is defined by applying an inverse-dynamic method to solve for internal forces driving the articulated figure to conform to a predefined animation curve.

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The internal force function may be scaled in any desired way, and combined with the external force function as input for a forward-dynamics motion simulation. The resulting motion simulation models a combined effect of the external force function and the predefined animation curve on motion of the articulated figure.

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